Alberta
ENERGY

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09-07

GAS ROYALTY CALCULATION INFORMATION BULLETIN July 2009

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PLEASE ENSURE YOUR PRODUCTION ACCOUNTANTS RECEIVE A COPY OF THIS DOCUMENT.

A. PRICING RATES AND TRANSPORTATION INFORMATION

For Pricing, Royalty Rates and Transportation Information for May 2009, refer to Attachments 1, 1A, 2, 2A and 3. These attachments are also available in Excel Format.

B. NOTICES

Drilling Royalty Credit Working Interest Owners for Oil Royalties

On March 3, 2009, the Government of Alberta announced a Drilling Royalty Credit for new conventional oil and natural gas wells. This credit will be paid to eligible companies on the basis of their company-wide Crown production of natural gas, oil and non-project oil sands. To ensure that the interests of all the Working Interest Owners (WIO) are taken into account, the department will be establishing credits for individual WIO. Each facility operator will be required to furnish to the department the names and Business Associate (BA) ID of WIO and the production attributable to each WIO for Oil Royalties.

To initiate the collection of the required information, the department has issued a 'Drilling Royalty Credit – Working Interest Ownership Determination' report to the 2008 facility operators. The report is available on the Petroleum Registry of Alberta. The operator must submit to the department the total Crown production for each WIO, aggregated for all facilities. This information must be submitted by letter to the department, no later than September 15, 2009.

For Gas Royalty clients, the working interest owner is already reported through the Owner Allocation Factor (OAF).

For further information, please contact Laurie Schneider at 780-422-9039.

Well Event Measured Depth Determination Letter

The department has issued a "Well Event Measured Depth Determination Letter" under the Report Package DOE – Gas to facility operators via the PRA on July 2 and July 8, 2009. This letter shows the confirmed Measured Depth (MD) of each active well event that will be used to calculate the Depth Factor (DF) of the quantity component rate under the new royalty formula. A well event that is not listed on the letter and does not have a confirmed MD will receive a DF of 1. When the changes to the MD are confirmed by the department, a letter is issued to a facility operator who reports changes through the PRA to well event attributes affecting MD. All changes to the MD are applied on a go forward basis only, if a retroactive change is required, a written request must be submitted to the department. Facility operators are advised to submit well event attribute changes by the last day of the calendar month in order for timely determination of MD.

C. MONTHLY INFORMATION

May 2009 Royalty Due August 31

- **Royalty clients are to remit the total amount payable shown on the August 2009 Statement of Account by August 31, 2009.** If the amount payable includes accrued current period interest, the interest has only been accrued to the statement issue date. Clients must also include the additional interest that has accrued from the statement issue date to the date of payment, using the per diem amount provided.

- **The August 2009 Statement of Account shows your amount payable as of the Statement issue date. It includes any outstanding balances from your previous statement, your May 2009 invoice amount and any applicable current period interest charges. It also identifies refunds resulting from overpayments.**

- Current period interest will not be charged on current invoice charges for the production month of May 2009 if it is paid in full by August 31, 2009.

- Current period interest will accrue on any overdue charges commencing the first day after the due-date until it is paid in full.

  Note: If the due date falls on a non-business day, the next business day will apply as the due date.

- Cheques are payable to the Minister of Finance, Province of Alberta.

June 2009 VA4 Due August 15

The VA4 forms for the production month of June 2009 are due in the department offices by August 15, 2009.

Note: If the due date falls on a non-business day, the next business day will apply as the due date for VA4 forms.

Registry Deadline Submissions

The Registry deadline submissions for SAF, OAF, and Volumetrics are posted in the Petroleum Registry of Alberta website "Reporting Calendars" under Bulletin Board.

Changes to this calendar will be posted on the Registry website home page in "Broadcast Messages."

Interest Rate July 2009

Alberta Energy's interest rate for July 2009 is 3.25%.

April Provisional Assessment Charge

The summary of Provisional Assessment Charges for all production periods in the April 2009 billing period was:

First Time Provisional Assessment	Reversals of Provisional Assessments	Net Provisional Assessment
$5,807,978.09	($3,671,810.91)	$2,136,167.18

April Penalty Charges

The penalty table below shows at the form level, the total penalty charges and reversals, for the April 2009 billing period:

FORM	Penalty Charges	Penalty Reversals	Net Penalty Charges for 2009/03
AC2	$22,900	($1,800)	$21,100
AC4	$200	$0	$200
AC5	$4,300	$0	$4,300
VA2	$0	($1,000)	($1,000)
VA3	$0	$0	$0
VA4	$800	($300)	$500
Total	$28,200	($3,100)	$25,100

Gas Royalty Calculation Support

Upon request, Gas Royalty Calculation staff will be available to meet with clients who need assistance with royalty reporting. Royalty clients requiring assistance are encouraged to contact your respective Gas Royalty Client Services portfolio representative, as identified in Section F of this bulletin, to arrange a meeting.

D. INFRASTRUCTURE DATA CHANGES

Client ID Listing

The BA Identifiers Report is a directory of Business Associate (BA) names, codes, status (e.g. struck, active, amalgamated, ect.), status effective dates, and effective August 2004, includes Working Interest Owner (WIO) role start/end dates.

This report is also published daily on the Petroleum Registry website at:

http://www.petroleumregistry.gov.ab.ca

The department reminds Business Associates to review their WIO role to ensure that the start and end dates are reflected correctly. If the BA does not have an active WIO role, the operators cannot allocate volumes to the BA for the relevant production periods through the SAF/OAF allocations.

- If a BA has a WIO role, then that BA can receive SAF/OAF allocations from the WIO role start date forward.
- If a BA has a WIO role with an end date, then they can only receive SAF/OAF allocations from the WIO role start date until the end date. Any SAF/OAF allocations after the end date will be rejected.
- If a BA does not have a WIO role start date, then that BA cannot receive SAF/OAF allocations.

Please contact Client Registry at 780-422-1395 if you have any questions regarding the information supplied on this listing.

Client Status Changes

Clients must ensure that all royalty documents are completed using only valid client names and IDs. It is critical that royalty clients use current legal client names and their appropriate IDs on all documents to ensure accurate royalty calculation and to prevent provisional assessment and penalties. Rejects will occur when invalid IDs are used.

If you require information regarding client names or IDs, please contact Client Registry at 780-422-1395.

Nova Tolls - Multiple Gas Reference Prices

Royalty information related to the implementation of the Factor Model negotiated with industry for determining Multiple Gas Valuation Prices is provided on the Natural Gas website's Royalty Related Information page under Facility Royalty Trigger Factors and Meter Station Ties.

E. REMINDERS

2009 Allowable Cost Allowances (Capital Cost, Custom Processing Fee and Operating Cost Allowances)

Effective January 2009, the Facility Effective Royalty Rate (FERR) replaced the Corporate Effective Royalty Rate (CERR) to determine the Crown share of cost allowances (capital, custom processing fee and operating cost allowances) at a client/facility level. Initially, the total estimated cost allowances were based on data published in the Allowable Cost Estimate (ACEST) report,

issued in March 2009. Whenever there is a recalculation of the go-forward cost estimates generated by the system, the department will re-issue an updated ACEST report.

Capital Cost and Custom Processing Fee Allowances

For the April 2009 to March 2010 billing period invoices, the capital cost and custom processing fee estimates will be recalculated using the most recent 2008 AC2, AC3, and AC5 documents. The information identified in the 2008 AC documents was used to calculate the actual 2008 capital cost and custom processing fee allowances for each client/facility. These calculations become the royalty client's 2009 go-forward allowable cost estimates. The Crown share of allowable costs is determined by multiplying each client/facility's cost by its FERR, minus the total deductions received in the January, February, and March 2009 billing period invoices, divided by the months remaining in the year (nine (9) months as of the April billing period).

Operating Cost Allowance

For the May 2009 to March 2010 billing period invoices, the operating cost estimates will be recalculated using the most recent 2008 AC4 actual costs filed for the designated facilities and non-designated processing type facilities, and distributed by using the 2008 AC2 distribution percentages. In the absence of AC2 distribution percentages, the costs will default to the facility cost centre operator. Operating cost estimates for all other non-designated facility types (gathering and compression for sweet, sour and dry plants), will be recalculated using the most recent January 2008 to December 2008 production period total client/facility volumes, multiplied by the actual 2008 gathering and compression Unit Operating Cost Rates (UOCR). The recalculation occurs in the May 2009 billing period invoice. The Annual Operating Cost Adjustment (AOP) to adjust the UOCR is processed once a year in the February billing period invoice, issued in April. The actual 2008 UOCR and the 2008 AOP adjustment was calculated in the 2009 February invoice issued in April 2009.

Facility Effective Royalty Rate

For the May 2009 to March 2010 billing period invoices, the January 2009 to April 2009 production periods' Crown royalty data was used to recalculate the FERR by client/facility.

Manual Cost Estimate Changes

If a royalty client requires a change to the 2009 go-forward allowable cost estimates and/or the FERR, a written request with supporting documentation must be submitted to the Gas Royalty Client Services (see Chapter 6, Section 1 of the Guidelines). These estimates must be calculated and submitted at a client/facility level.

Operating Costs Subject to Recapture

The Operating Costs Subject to Recapture report for the 2008 production year was issued in the April 2009 invoice in the June 2009 calendar month. Operating costs are recaptured from a royalty client who has volumes at a facility where they have no capital ownership (as identified on the

AC1, AC2 or AC3 submission) and no reported custom processing fees. A royalty client who is not an owner at a facility is not entitled to the operating costs they received on a monthly basis. The operating costs subject to recapture will be charged in the August 2009 billing period invoice issued in October 2009.

Change in Reporting for Royalty Liable Gas Used for Fuel (PURDISP and PURREC), effective June 4, 2009

Effective June 4, 2009, when there is a sale of gas or transfer of ownership within the royalty network, the seller is required to report PURDISP, which then auto populates the PURREC for the purchaser (receiving facility). This enhances controls to prevent fuel sale gas volumes from being incorrectly reported. This new reporting method also applies to all prior period amendments completed after June 4, 2009.

A purchase disposition (PURDISP) is a volume of product that has been sold by a facility to another facility within the royalty network. A PURDISP of gas is subject to Crown royalty charges. For example, effective June 4, 2009, if a Gas Plant (GP) sells gas for fuel to a Battery (BT) each month, the reporting is:

1. The GP operator must report a PURDISP.
2. This auto populates a PURREC at the BT.
3. The GP operator must then file a SAF/OAF for the PURDISP.

All parties should ensure that in network sales or gas transfers are correctly reported. If you require further information on these changes, please contact your respective Gas Royalty Client Services portfolio representative as identified in Section F of this bulletin.

Royalty Deposit Adjustment

The annual royalty deposit adjustment is calculated as $1/6^{th}$ of the client's previous year's royalty multiplied by a factor. The factor of 0.87 is calculated by dividing the current year's long term gas price for 2009 of $6.50 by the average 2008 Alberta reference price of $7.47. The adjustment has been processed in the Initial Annual Billing Period (IABP), June 2009 calendar month (April 2009 billing period invoice). If you have any questions, please contact Joyce Chen at 780-422-8083.

F. POINTS OF CONTACT

Petroleum Registry of Alberta

The Petroleum Registry of Alberta Service Desk is the focal point for communications with the Registry regarding preparations for, access to, or utilization of the Registry. To contact the Petroleum Registry of Alberta Service Desk call: 1-800-992-1144.

Alberta Energy Internet

Prices, Royalty Rates and Transportation Information are available on the Alberta Energy Internet address: www.energy.alberta.ca, from "Our Business", navigate to "Natural Gas", "About Natural Gas", "Prices", "Alberta Natural Gas Reference Price (ARP)".

In addition, both the Gas Royalty Information Bulletins and Information Letters are also available under "Our Business", navigate to "Natural Gas", "Legislation, Guidelines & Policies".

Gas Royalty Client Services

Gas Royalty Client Services is structured as a Business Associate client portfolio system, which assigns a given Business Associate to one of four Client Services teams. Listed below is the portfolio breakdown along with Client Services Team Leads and phone numbers. The portfolios are divided by company name and not by BA ID.

Example: If your company name is the "Gas Company" you would call C – G team at 780-644-1202.

Business Associate	Address	
Numbered companies, A, B & L	780-644-1201 GRCST1@gov.ab.ca	Todd Atwood
C – G	780-644-1202 GRCST2@gov.ab.ca	Lily Hiew
H – P (excluding L)	780-644-1203 GRCST3@gov.ab.ca	Chris Nixon
Q – Z	780-644-1204 GRCST4@gov.ab.ca	Jyoti Bhambhani

Gas Royalty Reception: 780-422-8727
Fax: 780-427-3334 or 780-422-8732
Alberta Toll Free: 780-310-0000

Hours of operation are 8:15 a.m. to 4:30 p.m. Voice messages left after 4:30 p.m. will be answered the next business day.

In situations where a company has just amalgamated or purchased another company, the general rule is to call the team that is responsible for the "Supra" business associate, or Royalty payer.

Below are some guidelines for clients who are unsure which Client Services Team to call regarding their questions.

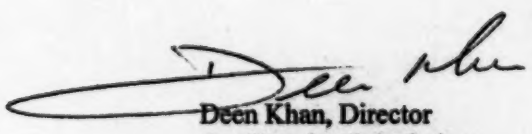
1. **Amalgamation/consolidation** - Call the team responsible for the "Supra" business associate (Royalty Payer).
   i.e. ABC Oil and Gas amalgamates with Zed Exploration and Zed is the amalgamator (royalty payer). When calling Client Services regarding business for ABC Oil and Gas, you would call Team 4 (Q-Z) (780-644-1204) because Zed Exploration is now the Supra business associate and royalty payer. This rule would apply even if you were calling regarding business that is prior to the acquisition or amalgamation.

2. **Asset Purchase** - Call the team responsible for your company.
   i.e. 123 Gas purchases the assets of TSP Exploration, but not the company. When calling Client Services regarding business for 123 Gas, you would call Team 1 (# Co., A, B, & L) (780-644-1201) because you have only purchased assets.

3. **Consultants/service providers** - If you have a contract to provide production accounting services to a company, call the team responsible for your client's company.
   i.e. Paul Snow Consulting Services enters into a contract with Duckback Oil and Gas and Olive Oil and Gas. Paul Snow would contact Team 2 (C-G) (780-644-1202) to discuss Duckback Oil business and Team 3 (H-P excluding L) (780-644-1203) to discuss Olive Oil and Gas business. At the time the contract is signed, Paul Snow would have had each company notify the appropriate team that he was authorized to access information for their company.

Reference Prices and Valuation Allowances Calculation Information

Gas Royalty Valuation and Markets
300, 801 – 6 Avenue SW
Calgary, Alberta T2P 3W2
Telephone: 403-297-5514
Fax: 403-297-5400



Deen Khan, Director
Gas Royalty Calculation
Royalty Operations – Edmonton

Attachments

ATTACHMENT 1

2009 GAS AND ISC PRICES

MONTH	Gas Reference Price ($/GJ)	Methane ISC Reference Price ($/GJ)	Methane ISC Par Price ($/GJ)	Ethane ISC Reference Price ($/GJ)	Propane ISC Reference Price ($/GJ)	Butane ISC Reference Price ($/GJ)	Pentanes plus ISC Reference Price ($/GJ)
JAN	5.77	5.74	5.74	6.15	6.27	6.29	6.31
FEB	4.66	4.61	4.61	5.12	5.30	5.33	5.35
MAR	4.01	3.97	3.97	4.53	4.71	4.72	4.75
APR	3.41	3.35	3.35	3.88	4.09	4.12	4.14
MAY	3.13	3.10	3.10	3.42	3.53	3.56	3.58
JUN							
JUL							
AUG							
SEPT							
OCT							
NOV							
DEC							

2008 Weighted Average Gas Reference Price ($/GJ)
7.412

2008 Weighted Average OMAC ($/GJ)
0.019

DETAIL OF THE MAY 2009 GAS AND ISC REFERENCE PRICES						
	Gas	Methane	C2-IC	C3-IC	C4-IC	C5-IC
Weighted Average Price of Alberta	3.415	3.394	3.608	3.673	3.673	3.678
Deductions: Intra – Alberta Transportation	0.251	0.267	0.152	0.107	0.083	0.063
Marketing Allowance	0.011	0.011	0.011	0.011	0.011	0.011
Price Before Pipeline Factor	3.153	3.116	3.445	3.555	3.579	3.604
Pipeline Fuel/Loss Factor	0.994	0.994	0.994	0.994	0.994	0.994
Price before Special Adjustment	3.134	3.097	3.424	3.533	3.558	3.583
Special Adjustment	0.000	0.000	0.000	0.000	0.000	0.000
Price before 2% amendment limitation or rounding	3.134	3.097	3.424	3.533	3.558	3.583
Amendments: Carry forward (from previous RP month)	-0.005	0.004	0.001	-0.003	0.003	0.000
Prior Period Amendment Adjustment (current RP month)	-0.003	-0.004	-0.002	-0.001	-0.001	-0.001
Calculated RP after Amendments	3.126	3.097	3.423	3.529	3.560	3.582
May 2009 Reference Price	**3.13**	**3.10**	**3.42**	**3.53**	**3.56**	**3.58**
Difference = value carried forward to next RP month	-0.004	-0.003	0.003	-0.001	0.000	0.002
Adjusted IATD (before Prior Period Amendments)		0.265	0.151	0.107	0.082	0.063
Prior period Amendments (IATD and Pipeline Fuel Loss)		0.000	0.000	0.000	0.000	0.000
Adjusted IATD (after Prior Period Amendments)		0.265	0.151	0.107	0.082	0.063

2009

NATURAL GAS LIQUIDS PRICES

MONTH	Ethane Reference Price ($/GJ)	Ethane Par Price ($/GJ)	Propane Reference Price ($/m3)	Propane Floor Price ($/m3)	Butane Reference Price ($/m3)	Butane Floor Price ($/m3)	Pentanes plus Reference Price ($/m3)	Pentanes plus Par Price ($/m3)	Sulphur Default Price ($ per tonne)
JAN	6.15	6.15	230.29	209.33	310.61	206.67	348.86	325.57	21.41
FEB	5.12	5.12	258.66	188.18	277.46	185.58	332.24	304.31	9.42
MAR	4.53	4.53	191.60	170.24	311.71	180.47	405.64	380.07	35.33
APR	3.88	3.88	171.72	169.45	298.88	176.85	399.85	370.33	28.70
MAY	3.42	3.42	168.58	167.74	297.93	187.74	423.40	391.47	25.58
JUN									
JUL									
AUG									
SEPT									
OCT									
NOV									
DEC									

ANNUAL SULPHUR DEFAULT PRICE

2004	2005	2006	2007	2008
31.88	33.98	18.82	32.82	$296.50

2009

NGL TRANSPORTATION ALLOWANCE AND DEDUCTIONS

MONTH	PENTANES PLUS (a)				PROPANE AND BUTANE (b)				PENTANES PLUS, PROPANE & BUTANE (c)				FRAC. ALLOW. (per m3)
	REGION				REGION				REGION				
	1	2	3	4	1	2	3	4	1	2	3	4	
JAN	27.97	10.55	36.88	18.00	39.25	25.79	33.99	-3.31	40.23	45.50	43.56	29.53	17.25
FEB	25.80	30.88	42.93	25.11	27.25	12.51	21.86	-11.81	46.71	47.25	67.48	33.91	17.25
MAR	26.82	21.32	38.98	22.16	37.54	27.84	31.17	-40.67	58.25	52.01	64.22	45.99	17.25
APR	28.19	26.90	45.36	29.98	42.87	25.56	35.55	8.19	55.88	50.16	60.38	42.39	17.25
MAY	29.40	28.03	63.30	29.70	33.17	20.09	88.53	46.06	46.67	43.29	56.38	34.81	17.25
JUN													
JUL													
AUG													
SEPT													
OCT													
NOV													
DEC													

(a) Pentanes Plus obtained as a specification gas product,
(b) Propane and Butane obtained as specification products, and
(c) Pentanes Plus, Propane and Butane contained in a natural gas liquids mix.

Note: For details on "Prior Period Amendment Effects", see Attachment 2A.

PRIOR PERIOD AMENDMENT EFFECTS				
NGL REFERENCE PRICES	May 2009			
	Propane	*Butanes*	*Pentanes*	
Price before amendments	168.576853	297.936077	423.405492	
Opening Rollover (from prior business mth)	-0.001402	-0.002601	-0.001785	
Prior Period Amendment Adj. (NGL-100)	0.000000	0.000000	0.000000	
Published Reference Price	**168.58**	**297.93**	**423.40**	

TRANSPORTATION ALLOWANCES	May 2009											
	Pentanes Plus				Propane and Butane				Pentanes Plus, Propane & Butane			
AMENDMENTS	Region 1	Region 2	Region 3	Region 4	Region 1	Region 2	Region 3	Region 4	Region 1	Region 2	Region 3	Region 4
Opening Rollover (from prior business mth)	-0.002302	0.001098	-0.000283	0.004854	0.001885	-0.000288	0.004449	0.003911	0.003981	0.000617	0.004954	-0.004931
Prior Period Amendment Adj. (NGL-100)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Total Amendment Effect	-0.002302	0.001098	-0.000283	0.004854	0.001885	-0.000288	0.004449	0.003911	0.003981	0.000617	0.004954	-0.004931
Calculated Transp. Differential	29.399543	28.033073	63.295914	29.699658	33.166653	20.090510	88.529442	46.054507	46.662737	43.292474	56.374608	34.819676
Calculated Transp. Differential after Total Amendments	29.397241	28.034171	63.295631	29.704512	33.168538	20.090222	88.533891	46.058418	46.666718	43.293091	56.379562	34.814745
Published Transportation Allowance	**29.40**	**28.03**	**63.30**	**29.70**	**33.17**	**20.09**	**88.53**	**46.06**	**46.67**	**43.29**	**56.38**	**34.81**

Effective the January 2009 production period, the royalty rates for **methane** and **ethane** will be calculated based on a new royalty formula. The new royalty formula consists of the sum of a price component and a quantity component. The new royalty rates will range from 5% to 50%. **Propane** and **butanes** will have fixed royalty rates of 30%, whereas **pentanes plus** will have a fixed royalty rate of 40%.

The price component of the new royalty formula royalty rate for methane and ethane is determined by the monthly methane or ethane par price (PP)

Price ($/GJ)	r_p
PP ≤ 7.00	(PP – 4.50) * 0.0450
7.00 < PP ≤ 11.00	(PP – 7.00) * 0.0300 + 0.1125
PP > 11.00	(PP – 11.00) * 0.0100 + 0.2325
Maximum	30%
Minimum	Can be negative (-20.25% if PP=0)

The par price is a provincial weighted price determined by the department and published in the Information Letter for each production month. Determination of the par price has not changed under the Alberta Royalty Framework.

The quantity component of the new royalty formula royalty rate for methane and ethane is based on the average daily production (ADP) of the well event. The quantity component is adjusted for either the depth of the well event and/or the acid gas content of the well event.

Quantity ($10^3m^3/d$)	r_q
ADP≤ (6 * DF)	[ADP – (4 * DF)] * (0.0500/DF)
(6 * DF) < ADP ≤ (11* DF)	[ADP – (6 * DF)] * (0.0300/DF) + 0.1000
ADP > (11* DF)	[ADP – (11 * DF)] * (0.0100/DF) + 0.2500
Maximum	30%
Minimum	Can be negative

The ADP for a well event is the total raw gas production in thousand cubic metres (10^3m^3) for the month divided by the total hours of production in that month multiplied by 24. The ADP formula is as follows:

$$\textbf{ADP} = \frac{\textbf{total raw gas production}}{\textbf{total hours of production}} \times 24$$

Acid Gas Factor (AGF) is a factor that adjusts the ADP of a well event if that well event is producing high amounts of acid gas, that is, if the combined concentration of hydrogen sulphide (H2S) and carbon dioxide (CO_2) is greater than 3% and less than or equal to 25%. If a well event has an acid gas content of less than or equal to 3%, then the AGF of the well event will default to 1.00. If a well event has acid gas content greater than 25% then the AGF has a minimum value of 0.78.

The AGF is determined based on the following formula:

$AGF = [1.03 – (H_2S\% + CO_2\%)]$

The ADP is adjusted by multiplying the ADP by the AGF, that is:

Adjusted ADP = ADP * AGF

The acid gas content of a well event, used by the department for the determination of the AGF, will be according to the records of the ERCB.

A depth factor (DF) is required for all well events, and is calculated based on the measured depth (MD) according to the records of the ERCB for that well event. Information on the MD, of a well event, can be found on the Petroleum Registry of Alberta (PRA) in the 'Infrastructure' section.

The DF is used in the determination of the quantity component (r_q) of the royalty rate; it adjusts the quantity component royalty formula for measured depths that exceed 2000 metres. The DF for a well event is determined based on the following formula:

$$DF = \left(\frac{MD}{2000}\right)^2$$

A well event with a MD greater than 2,000 metres will receive a royalty adjustment based on production from the well event. A well event without a reported MD or with MD less than or equal to 2,000 metres will have a DF of 1.00. The DF is capped at 4.00 for well events with MD greater than or equal to 4,000 metres.

If the MD is

- ≤ 2,000 metres, then the DF=1.00
- >2,000 metres and <4,000 metres, then DF= $\left(\frac{MD}{2000}\right)^2$
- ≥4,000 metres, then the DF=4.00